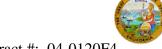
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

70.28 File #:

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-005443 Address: 333 Burma Road **Date Inspected:** 11-Feb-2009

City: Oakland, CA 94607

OSM Arrival Time: 830 **Project Name:** SAS Superstructure **OSM Departure Time:** 1630 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Japan Steel Works **Location:** Muroran, Japan

CWI Name: CWI Present: Yes No Chung Kuan **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A Yes N/A **Qualified Welders:** No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Tower, Jacking and Deviation saddles

Summary of Items Observed:

Steel Structure Welding Shop:

W2E3 West Deviation Saddle Steel Structure: Caltrans Quality Assurance Inspector (QAI) representative observed Japan Steel Works (JSW) welders performed FCAW fillet weld processes on weld access holes on rib plates 3-9, 3-11 and 3-12 of W2E3 west deviation saddle. The filler metal and shield gas used for FCAW is Hoballoy wire TM-95K2, 1.6 diameter with 100% C02. The entire welding zone has been preheated to a minimum 110C prior welding. The FCAW welding process and parameters have been monitored and recorded by CWI inspector Mr. Chung Kuan. Based on Caltrans QA observation, the FCAW fillet weld welding operation appeared to be in general compliance with requirements of AWS D1.5 2002 and Caltrans contract documents.

W2W1 West Deviation Saddle Steel Structure: Caltrans QAI representative observed a welder perform Shielded Metal Arc Welding (SMAW) 4 layer root pass on rib plate 4-17 of W2W1 west deviation saddle. The proper filler metal used for SMAW is Hoballoy 9018-M with 4mm diameter electrode made by Hobart Brothers, USA. The entire steel structure remains preheated to a temperature minimum of 110C degree during root pass welding. The root pass welding process and parameters have been monitored and recorded by CWI inspector Mr. Chung Kuan. Based on Caltrans QA observation, the SMAW root pass welding operation appeared to be in general compliance with requirements of AWS D1.5 2002 and Caltrans contract documents. The SMAW root pass welding surface also has been MT test after welding.

T1-2 Tower Saddle Casting: Caltrans QAI representative observed two welders perform SMAW buildup welding on two casting area surfaces. The buildup weld metal is for the temporary reinforcement supply structure. The buildup metal welding utilized the SMAW process and was conducted by welders in the uphill vertical position

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

(3G). A 6mm high weld metal has been weld up on surface. The proper filler metal used for SMAW is LB52A (E7016) with 5mm diameter electrode made by Kobe, Japan. The SMAW welding process and parameters have been uses Caltrans approved WPS # SJ-3012-5, also monitored and recorded by CWI inspector Mr. Chung Kuan. Based on Caltrans QA observation, the SMAW welding operation appeared to be in general compliance with requirements of AWS D1.5 2002 and Caltrans approved RFI documents.

Summary of Conversations:

As noted within the report above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Pau,Wai	Quality Assurance Inspector
Reviewed By:	Lanz,Joe	QA Reviewer